Claims

1. Creep-proof and corrosion-resistant nickel-based alloy for the use in high-temperature technology comprising in wt-%

   0.0015 to 0.60 carbon (C)
   0.20 to 0.90 nitrogen (N)
   22.0 to 32.0 chromium (Cr)
   5.0 to 20.0 elements of the groups 4, 5, and 6 of the periodic table, except Cr
   0.03 to 3.0 aluminum (Al)
   0.4 to 3.0 silicon (Si)
   up to 0.15 elements of group 3 of the periodic table, except actinoids
   up to 0.60 manganese (Mn)
   up to 14.8 iron (Fe)
   up to 0.01 boron (B)
   maximum of 0.014 phosphorus (P)
   maximum of 0.004 sulfur (S)
   minimum of 51 nickel (Ni) and/or cobalt (Co)
   and melting-related contaminants.

2. Nickel-based alloy according to claim 1, comprising in wt-% 0.16 to 0.5 C.

3. Nickel-based alloy according to claim 1 or 2 with the condition that the ratio value of nitrogen to carbon is 0.5 to 5.5, preferably 1 to 4, optionally 1 to 3

   N/C = 0.5 to 5.5, preferably 1.0 to 4.0, optionally 1 to 3.

4. Nickel-based alloy according to one of the claims 1 through 3, comprising a total concentration of molybdenum and tungsten in wt-% according to the following formula:

   Mo + W/2 = 3.0 to 10.0, preferably 4.0 to 8.0.

5. Nickel-based alloy according to one of claims 1 through 4, comprising in wt-% Cr 25.0 to 30.0.

6. Nickel-based alloy according to claims 1 through 5, comprising in wt-% Si 0.5 to 1.0.

7. Nickel-based alloy according to one of claims 1 though 6, comprising in wt-% 0.01 to 0.12 elements of the group 3 of the periodic table, except actinoids.